

IN THE CLAIMS:

1-2. (canceled)

3. (presently amended) A composition comprising a charge tag attached to a terminal end of a nucleic acid molecule, said charge tag comprising a phosphate group and a positively charged moiety, wherein said charge tag further comprises a dye, and The composition of Claim 2, wherein said dye is positioned between said nucleic acid and said positively charged moiety.

4-8. (canceled)

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9. (presently amended) The composition of Claim 2, A composition comprising a charge tag attached to a terminal end of a nucleic acid molecule, said charge tag comprising a phosphate group and a positively charged moiety, wherein said charge tag further comprises a dye, and wherein said nucleic acid molecule comprises a sequence complementary to a target nucleic acid, and wherein said charge tag further comprises one or more nucleotides that are not complementary to said target nucleic acid.

10. (presently amended) The composition of Claim 2, A composition comprising a charge tag attached to a terminal end of a nucleic acid molecule, said charge tag comprising a phosphate group and a positively charged moiety, wherein said charge tag further comprises a dye, and wherein said nucleic acid comprises a first portion complementary to a target nucleic acid and a second portion that is not complementary to said target nucleic acid, wherein said second portion comprises said terminal end.

11-16. (canceled)

17. (presently amended) The composition of Claim 2, A composition comprising a charge tag attached to a terminal end of a nucleic acid molecule, said charge tag comprising a phosphate group and a positively charged moiety, wherein said charge tag further comprises a dye, and wherein said charge tag further comprises a positively charged phosphoramidite.

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18-22. (canceled)

23. (previously amended) A composition comprising a positively charged phosphoramidite, wherein said phosphoramidite comprises an ammonium group.

24. (canceled)

25. (previously amended) A composition comprising a positively charged phosphoramidite, wherein said phosphoramidite has the structure:



wherein, X is a reactive phosphate group and Y is a protected hydroxyl group.

26-38. (canceled)

39. (presently amended) A composition comprising a fluorescent dye directly bonded to a phosphate group, wherein said phosphate group is directly bonded to an amine group, wherein said composition comprises a charge tag, and wherein said fluorescent dye is contained within said charge tag, and The composition of Claim 38, wherein said fluorescent dye comprises Cy3.

40. (original) A mixture comprising a plurality of oligonucleotides, each oligonucleotide attached to a different charge tag, each of said charge tags comprising a phosphate group and a positively charged moiety.

41. (original) The mixture of Claim 40, wherein said plurality of oligonucleotides comprises four or more oligonucleotides, each attached to a different charge tag.

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42. (original) The mixture of Claim 40, wherein said plurality of oligonucleotides comprises ten or more oligonucleotides, each attached to a different charge tag.

43. (original) The mixture of Claim 40, wherein said plurality of oligonucleotides comprises twenty or more oligonucleotides, each attached to a different charge tag.

44. (original) The mixture of Claim 40, wherein said plurality of oligonucleotides comprises fifty or more oligonucleotides, each attached to a different charge tag.

45. (original) The mixture of Claim 40, wherein said charge tags comprise a dye.

46. (original) The mixture of Claim 40, wherein said charge tags comprise a second positively charged moiety.

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CD4+*
47. (original) The mixture of Claim 40, wherein said charge tags further comprise one or more nucleotides.

48. (original) The mixture of Claim 40, wherein each of said oligonucleotides attached to a charge tag have a combined net neutral charge and wherein said charge tag has a net positive charge.

49. (renumbered from a duplicate original claim 48) The mixture of Claim 40, wherein each of said oligonucleotides attached to a charge tag have a combined net negative charge and wherein said charge tag has a net positive charge.

50. (renumbered from original claim 49) The mixture of Claim 40, wherein said charge tags comprise a positively charged phosphoramidite.

51. (renumbered from original claim 50) The mixture of Claim 40, wherein said charge tags comprise a neutral phosphoramidite.

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51-85. (canceled)

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86. (new) The composition of Claim 9, wherein said dye is positioned between said nucleic acid and said positively charged moiety.

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87. (new) The composition of Claim 9, wherein said charge tag has a net positive charge of 1 at pH 6-10.

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88. (new) The composition of Claim 9, wherein said charge tag has a net positive charge of 2 at pH 6-10.

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89. (new) The composition of Claim 9, wherein said nucleic acid and said charge tag have a combined net neutral charge and wherein said charge tag has a net positive charge.

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90. (new) The composition of Claim 9, wherein said nucleic acid and said charge tag have a combined net negative charge and wherein said charge tag has a net positive charge.

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91. (new) The composition of Claim 9, wherein said charge tag contains a tertiary amine.

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92. (new) The composition of Claim 9, wherein said charge tag contains an ammonium group.

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